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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/797,732

03/10/2004

Ramiro Quintero Illera

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12/28/2005

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EXAMINER

LE, HOANGANH T

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/797,732

Applicant(s)

QUINTERO ILLERA ET AL.

Examiner

HoangAnh T. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 and 33-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-12, 25-30 and 33-39 is/are rejected.
- 7) ☒ Claim(s) 4-6 and 13-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


HoangAnh Le
Primary Examiner

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on November 10, 2005 is acknowledged.

Claim Objections

2. Claim 7 is objected to because of the following informalities: in claim 7, line 2, "said antenna device" should be-- said ground plane--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, and 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Kikuchi et al (the US Patent No. 6,717,494, of record).

The Kikuchi et al reference teaches in figure 14 a ground-plane 51 for an antenna device characterized in that the ground-plane includes at least two conducting surfaces, the two conducting surfaces being connected by at least a one conducting strip which allows current to flow from one conducting surface to another, the strip being

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narrower than the width of any of the two conducting surface (figure 14 and col. 13, lines 30-40). The conducting surfaces are on a common planar or curved surface (figure 14). Two edges of at least two conducting surfaces are placed substantially parallel to each other, and the at least one conducting strip connecting the two conducting surfaces is placed substantially centered with respect to the gap defined by the two substantially parallel edges (figure 14). The ground-plane comprises a plurality of conducting surfaces on the same planar or curved surface, wherein at least two of the conducting surfaces are connected by a conducting strip (figure 14). Each two adjacent conducting surfaces are connected by at least a one conducting strip. All the conducting surfaces defining the round-plane have a substantially rectangular shape, the rectangular shapes being sequentially aligned along a straight axis, each pair of rectangular shapes defining a gap between them, at least two opposite edges of at least one of the gaps being connected by at least one conducting strip (figure 14). All the conducting surfaces defining the ground-plane have the same horizontal width and are sequentially aligned along a straight vertical axis, wherein each pair of adjacent conducting surfaces define a gap between them, wherein each pair of adjacent conducting surfaces are connected across the gap by a conducting strip, the strip being aligned along an edge of the external perimeter of the ground-plane, the edge being alternatively and sequentially chosen at the right and left sides with respect to a vertical axis crossing the center of the ground-plane (figure 14).

5. Claims 1,2,7-11,25-30, and 33-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Cohen (the US Patent No. 6,140,975, of record).

The Cohen reference teaches in figure 11B a ground-plane 800 for an antenna device characterized in that the ground-plane includes at least two conducting surfaces, the two conducting surfaces being connected by at least a one conducting strip which allows current to flow from one conducting surface to another, the strip being narrower than the width of any of the two conducting surface (figure 11B). The conducting surfaces are on a common planar or curved surface (figure 11B). The antenna device includes at least two conducting strips, both strips connecting at least two of the conducting surfaces at least at two points located at both edges of the conducting surfaces (figure 11B). At least one of the strips is aligned along one of the edges defining an external perimeter of the ground-plane. The ground-plane comprising a plurality of conducting surfaces on the same planar or curved surface, wherein at least two of the conducting surfaces are connected by a conducting strip (figure 11B). The antenna device includes a monopole antenna (figure 7D). The antenna device is included in a cellular telephone, a cordless telephone, a personal digital assistant (PDA), a wireless paging device, an electronic game device or a remote control (figure 8B). The ground-plane is included in a handheld wireless device and wherein the antenna device includes a microstrip patch antenna configuration or a planar inverted-F (PIFA) antenna configuration (figure 11B).

6. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Bae (the US Patent No 6,359,589).

The Bae reference teaches in figure 11 a ground-plane 40 for an antenna device characterized in that the ground-plane includes at least two conducting surfaces 41,43,

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the two conducting surfaces being connected by at least a one conducting strip 42 which allows current to flow from one conducting surface to another, the strip being narrower than the width of any of the two conducting surface (figure 11). The conducting surfaces are on a common planar or curved surface (figure 11). Two edges of at least two conducting surfaces are placed substantially parallel to each other, and the at least one conducting strip connecting the two conducting surfaces is placed substantially centered with respect to the gap defined by the two substantially parallel edges (figure 11).

Allowable Subject Matter

7. Claims 4-6, and 13-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. In response to applicant's arguments, the recitation "for an antenna device of the type used in a handheld electronic device" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to

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stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Since Kikuchi, Cohen, and Bae do show all claimed structure, including two conducting surfaces and a conducting strip connected to the conducting surfaces, the 102 rejections are proper.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

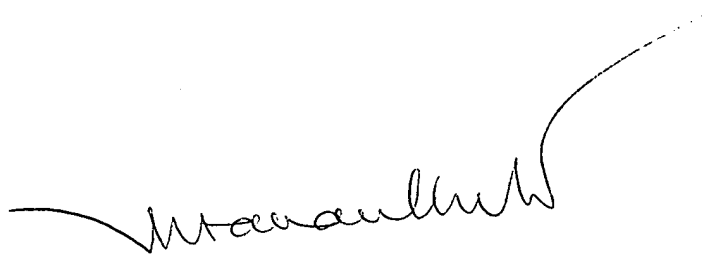
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HoangAnh T. Le whose telephone number is (571) 272-1823. The examiner can normally be reached on 8:00am-4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Hoanganh Le', with a long, sweeping horizontal line extending to the left and a vertical line extending upwards to the right.

Hoanganh Le
Primary Examiner